Topic: Introduction to Geomagnetism

Audience: Afghanistan Geological Survey (AGS) Geophysics Team

Participants: 10 Duration: 4 hours

Delivered: March 19-20, 2006 Instructor: Charles Lindsay (USGS)

Summary:

This course presented participants with a review of geomagnetism and introduced some new developments fundamental to magnetic surveying. The following concepts were addressed:

- 1) origin of Earth's magnetic field
- 2) magnetic force
- 3) magnetic flux
- 4) dipoles
- 5) units of magnetism
- 6) magnetic properties of rocks
- 7) International Geomagnetic Reference Field
- 8) diurnal variation
- 9) magnetic storms
- 10) proton precession magnetometers

These concepts were presented in order to provide a background understanding of geomagnetism necessary for the operation of a magnetometer as a base station.

Participants:

Mohammad Alam Said Ashan Faizulla Sardar Hussain Nassima Jan Abdul Hakim Kohistany Abdul Rahman Momand Ghulam Rahman Ghulam Sakhi Mohammad Zia